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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,313

08/27/2003

Makoto Mogamiya

P23749

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7055 7590 04/10/2009  
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EXAMINER

KHAN, USMAN A

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

04/10/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/648,313	<b>Applicant(s)</b> MOGAMIYA ET AL.	
	<b>Examiner</b> USMAN KHAN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/09/2009 has been entered.

### ***Response to Arguments***

Applicant's arguments filed on 01/07/2009 with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

### **DETAILED ACTION**

#### ***Claim Objection***

**Claims 12 - 14** are objected to because of the following informalities: portions of each of these dependent claims should be changed from "*the frame member located*" to **--the frame member which is located--**. Appropriate correction is required.

**Claim 13** are objected to because of the following informalities: the claim should be changed from "*is the frame member*" to **--the frame member --**. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1 and 9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 9 claims a sealing member having a first end portion affixed to the shutter, the examiner, after reviewing the original specification as filed, is unsure of how the sealing member can be affixed to the shutter. The shutter is a moving part that opens and closes when capturing an image and hence is unable to be affixed to the sealing member.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 - 7 and 18 - 19 are rejected under 35 U.S.C. 102(b) as being anticipated by SCHOENHERR (DE 4414318 A1).

Regarding **claim 1**, SCHOENHERR teaches an electronic still camera comprising:

an image pickup element (Figure 1 item 5) provided in an optically isolated space (Figure 1 space running between item 5 and 14 is isolated from the outside of the camera) which is opened and closed by a shutter (figure 1 item 14); an image pickup optical system which makes object light incident upon the image pickup element (figure 1, light comes in from the opening of 17 and is captured by the item 5); and a sealing member having a first end portion affixed to the shutter (items 1 and 7 - 12 and 15 – 16 as a group is affixed to the shutter 14 either directly or indirectly) and further having a second end portion affixed to the image pickup element (items 1 and 7 - 12 and 15 – 16 as a group is affixed to the item 5 either directly or indirectly), and configured to seal an image pickup light path extending from the shutter to the image pickup element (Figure 1 space running between item 5 and 14 is sealed and isolated from the outside of the camera by items 1 and 7 - 12 and 15 – 16 as a group).

Regarding **claim 2**, as mentioned above in the discussion of claim 1, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the sealing member comprises a tubular member which surrounds a light path space extending from the shutter and to the image pickup element (any combination of items 8 – 12 and 15 – 16).

Regarding **claim 3**, as mentioned above in the discussion of claim 2, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that aid tubular member is configured to be extendable and

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contractible in an optical axis direction of the image pickup optical system (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible); and wherein an optical element is fitted in an opening of said tubular member on an object side to seal the tubular member (figure 1 item 16).

Regarding **claim 4**, as mentioned above in the discussion of claim 1, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the sealing member comprises a tubular member which surrounds a light path space extending from the shutter and to an image pickup surface of the image pickup element (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible), wherein said tubular member is extendable and contractible in an optical axis direction of the image pickup optical system (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible), said tubular member being closely connected, at the end thereof which defines an opening end on the object side, to a frame member, which restricts an aperture which is opened and closed by the shutter (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible and frame member 15), and an optical element which seals the frame member (figure 1 item 16).

Regarding **claim 5**, as mentioned above in the discussion of claim 3, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the tubular member is in close contact, at an end surface thereof defining the opening on the object side, with the frame member which restricts the aperture opened and closed by the shutter (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible and frame member 15).

Regarding **claim 6**, as mentioned above in the discussion of claim 3, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the optical element is secured to the frame member (figure 1 items 15 and 16).

Regarding **claim 7**, as mentioned above in the discussion of claim 3, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the optical member is a transparent plane-parallel plate (figure 1 item 16).

Regarding **claim 18**, as mentioned above in the discussion of claim 1, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the sealing member is elastic (figure 1 item 8 is

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extendable and contractible i.e. elastic hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible and frame member 15).

Regarding **claim 19**, as mentioned above in the discussion of claim 1, SCHOENHERR teaches all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the sealing member is **generally** bellows shaped (figure 1 item 8).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 – 17 and 20 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOENHERR (DE 4414318 A1) in view of Oguma (US patent No. 6,225,244).

Regarding **claim 8**, as mentioned above in the discussion of claim 3, SCHOENHERR teaches all of the limitations of the parent claim. However, SCHOENHERR fails to disclose that the said optical element comprises at least one of a low-pass filter and an infrared absorption filter. Oguma, on the other hand discloses that the said optical element comprises at least one of a low-pass filter and an infrared absorption filter.

More specifically, Oguma discloses that said optical element comprises a low-pass filter and an infrared absorption filter (figure 1 items 2, 2', and 3).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Oguma with the teachings of SCHOENHERR because in column 2 lines 15 - 27 Oguma discloses that the use a low-pass filter and an infrared absorption filter will provide the following advantage: providing a glass for a near infrared absorption filter, which is durable in use for a long period of time, has high climate resistance and a high transmittance to light in ultraviolet to visible light regions and has excellent alkali resistance. This will improve functionality of the camera of SCHOENHERR.

Regarding **claim 9**, SCHOENHERR teaches an electronic still camera comprising:

an image pickup element (Figure 1 item 5) provided in an optically isolated space (Figure 1 space running between item 5 and 14 is isolated from the outside of the camera) which is opened and closed by a shutter (figure 1 item 14);

an image pickup optical system configured to make object light incident upon the image pickup element (figure 1, light comes in from the opening of 17 and is captured by the item 5); and

a frame member configured to restrict an aperture which is opened and closed by the shutter (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible and frame member 15); and

a tubular sealing member surrounding a light path space extending from the shutter to the image pickup element (figure 1 item 8 is extendable and contractible hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible), said tubular sealing member comprising:

a first end portion affixed to the shutter (items 1 and 7 - 12 and 15 – 16 as a group is affixed to the shutter 14 either directly or indirectly); and

a second end portion affixed to the image pickup element (items 1 and 7 - 12 and 15 – 16 as a group is affixed to the item 5 either directly or indirectly), wherein:

said tubular sealing member configured to seal an image pickup light path extending from the shutter to the image pickup element(Figure 1 space running between item 5 and 14 is sealed and isolated from the outside of the camera by items 1 and 7 - 12 and 15 – 16 as a group).

However, SCHOENHERR fails to disclose said frame member being provided with at least one of a low-pass filter and an infrared absorption filter secured thereto; the at least one of the low-pass filter and the infrared absorption filter is sealed by the sealing member. Oguma, on the other hand discloses said frame member being provided with at least one of a low-pass filter and an infrared absorption filter secured thereto; the at least one of the low-pass filter and the infrared absorption filter is sealed by the sealing member.

More specifically, Oguma discloses said frame member being provided with at least one of a low-pass filter and an infrared absorption filter secured thereto; the at

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least one of the low-pass filter and the infrared absorption filter is sealed by the sealing member (figure 1 items 2, 2', and 3).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Oguma with the teachings of SCHOENHERR because in column 2 lines 15 - 27 Oguma discloses that the use a low-pass filter and an infrared absorption filter will provide the following advantage: providing a glass for a near infrared absorption filter, which is durable in use for a long period of time, has high climate resistance and a high transmittance to light in ultraviolet to visible light regions and has excellent alkali resistance. This will improve functionality of the camera of SCHOENHERR.

Regarding **claim 10**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma. teach all of the limitations of the parent claim. Additionally, Oguma teaches that said low-pass filter and the infrared absorption filter are cemented to each other (figure 1 items 2, 2', and 3).

Regarding **claim 11**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma. teach all of the limitations of the parent claim. Additionally, Oguma teaches that said low-pass filter is closely secured to the frame member which is located closer to the image pickup element than the shutter (figure 1 items 2' and 3).

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Regarding **claim 12**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma. teach all of the limitations of the parent claim. Additionally, Oguma teaches that the said infrared absorption filter is secured to the frame member, the frame member located closer to the image pickup element than the shutter (figure 1 items 2 and 3).

Regarding **claim 13**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma. teach all of the limitations of the parent claim. Additionally, Oguma teaches that one of said low-pass filter and said infrared absorption filter is secured to the frame member, is the frame member located closer to an object than the shutter (figure 1 items 2 or 3 is closer then 2').

Regarding **claim 14**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma. teach all of the limitations of the parent claim. Additionally, Oguma teaches that said infrared absorption filter is secured to the frame member, is the frame member located closer to an object than the shutter (figure 1 item 3 is closer then 2').

Regarding **claim 15**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma. teach all of the limitations of the parent claim. Additionally, Oguma teaches that an optical filter fitted in an opening at an object side of

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said sealing member (figure 1 items 2 is on object side when compared to items 2' and 3).

Regarding **claim 16**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma teach all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the frame member is provided at an object side of the optically isolated space (figure 1 item 15).

Regarding **claim 17**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma teach all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the frame member supports the shutter (figure 1, frame item 15 supports shutter item 14).

Regarding **claim 20**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma teach all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the sealing member is elastic (figure 1 item 8 is extendable and contractible i.e. elastic hence the combination of 8 – 12 and 15 – 16 are together be extendable and contractible and frame member 15).

Regarding **claim 21**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma teach all of the limitations of the parent claim.

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Additionally, SCHOENHERR teaches that the sealing member is **generally** bellows shaped (figure 1 item 8).

Regarding **claim 22**, as mentioned above in the discussion of claim 9, SCHOENHERR in view of Oguma teach all of the limitations of the parent claim. Additionally, SCHOENHERR teaches that the shutter is mounted on the frame member (figure 1, frame item 15 supports shutter item 14).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to USMAN KHAN whose telephone number is (571)270-1131. The examiner can normally be reached on Mon-Fri 6:45-3:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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04/02/2009  
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